

WORKING GROUP ACTIVITY REPORT

Date: March 27th, 2000

- ARAC Issue Group: Transport Airplanes and Engines
- Working Group Name: Flight Guidance System HWG
- Task Title:
25.1329/25.1335 - Automatic Flight Control and Guidance
System Requirements Harmonization and Technology
Update

- Task Description

Review 25.1329/1335, JAR paragraphs 25.1329/1335 plus material contained in NPA 25F-243 in addition to Sec. 121.579 and the associated Advisory Circular 25.1329-1 and ACJ 25.1329. Update and harmonize the Part 25 sections and the associated guidance material, in the light of the review of regulatory materials, current certification experience, and changes in technology and system design.

Review recommendations that stem from recent transport aviation events and relate to crew error, cockpit automation and in particular, automatic flight control/guidance made by the NTSB, the FAA Human Factors Team, and the JAA Human Factors Steering Group. Make any proposed amendments to Sections. 25.1329/25.1335 and advisory materials that are needed to resolve these recommendations.

- Expected Product(s) NPRM ✓ AC ✓ Other ✓
 - Proposal for revisions to the Flight Test Guide

Handout 10

• Status & Schedule:

Status

At the time of the last report to TAEIG, the Rule was considered 99% complete and the AC/ACJ was maturing at Draft 10. However, 27 comments were received on the Rule and 275 comments were received on the AC/ACJ.

An Editor's meeting was held in February and a significant number of the 300+ comments were addressed. A FAA Technical Editor participated in the Editor's meeting. The Editing Team produced an update to the Rule and AC/ACJ [Draft 11] based upon the comments received. The updated Rule and AC/ACJ was distributed to the FGSHWG members to support the Plenary meeting in March.

At the Plenary meeting, the Rule was adjusted slightly and is now considered 'complete'. Discussions at the Plenary meeting provided material to support a further update to the AC/ACJ. Draft 12 of the AC/ACJ was distributed to the FGSHWG on March 5.

The amount of work remaining and the schedule were reviewed by the Plenary. Two major sections of the AC/ACJ were discussed for the first time within the Plenary and the new Working Group format was reviewed with the Group for the first time. It was agreed that the remaining work could not be completed at the last meeting planned for Seattle in June.

Future Plans

Draft 12 of the AC/ACJ is being reviewed by the FGSHWG at this time. Comments are due by April 2nd. An Editors meeting is scheduled for April 9th – 11th. The Editors will address the comments received from the Group, will develop the two remaining immature sections and will work on the remaining administrative items.

A meeting is scheduled in Seattle for the week of June 4th and the final meeting is now scheduled for the week of October 1st in the UK.

Schedule

Date	Meeting type	Location	Comment
April 9-11, 2001	Editors	Gatwick	Leading to Draft 13
April 27, 2001			Draft 13 distributed to HWG
June 4-8, 2001	Plenary	SEA	Work to support preparation of final draft [Draft 14]

			95% Technical Agreement
June 22, 2001			Draft 14 distributed to HWG with ballot
October 1-3	Plenary	UK	Disposition of ballot comments Final technical agreement
October 4-4	Editors	UK	Prepare final package
October 10	Co-chairs		Submit T AEIG package

The following Table contains the status and plan for the rest of the work for the FGSHWG

AC/ACJ and Working Group Report schedule

Section	Estimate % Complete	To be worked at:	Achieve technical agreement at:	Primary Responsibility:
1. Purpose	100			
2. Cancellation/Effective Date	100			
3. Related FAR/JAR Sections	100			
4. Related Documents	99	Gatwick	Seattle	Editors
5. Definitions and Acronyms	99	Gatwick	Seattle	Editors
6. Background	100			
7. General	100			
8. Controls, Indications And Alerts	98	Gatwick	Seattle	Editors
9. Characteristics at Engagement, Disengagement, and Override	95	Gatwick	Seattle	Editors
10. Performance Of Function	98	Gatwick	Seattle	Editors
11. Characteristics Of Specific Modes	95	Gatwick	Seattle	Editors
12. Functional Integration	95	Gatwick	Seattle	Editors
13. Safety Assessment	85	Gatwick	Seattle	JA,
14. Flight Test, Simulator Demonstration, And Analysis	60	Gatwick	Seattle	GB
15. Airplane Flight Manual	95	Gatwick	Seattle	TI, DD
Appendix A Safety Assessment	95	Gatwick	Seattle	JA
Appendix X (applicability considerations)	0	Gatwick	Seattle	All Members
• Working Group Report -	10	Gatwick	Seattle	Editors
• NTSB recommendations	0	Seattle	UK	Editors
Inputs to Flight Test Guide	0	Gatwick & Seattle	UK	Editors